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SPECIAL DATA COLLECTION SYSTEM (SDCS) EVENT REPORT,  
TURKEY, 6 SEPTEMBER 1975

Teledyne Geotech

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5 February 1976

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**SPECIAL DATA COLLECTION SYSTEM EVENT REPORT**  
**Turkey, 6 September 1975**

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**Alexandria Laboratories**

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**February 1976**

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**312 Montgomery Street, Alexandria, Virginia 22314**

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SDCS EVENT REPORT NO. 69

Turkey, 6 September 1975

This event report contains seismic data from the Special Data Collection System (SDCS), and other sources for the above event. Published epicenter information from seismic observations is:

	"P" Arrival	Origin Time	Lat.	Long.	$m_b$	$M_s$
NORSAR	09:26:10.1	09:20:08	38 N	041 E	6.1	N/A
Hagfors		09:18:27	27 N	045 E	6.4	N/A

Using SDCS stations, LASA and NORSAR, the epicenter location and magnitudes become

09:20:09.3    38.5N    040.7E    6.3    5.8

All SDCS stations were operational during this period.

Short-period signals associated with this event were recorded at all SDCS stations, LASA and NORSAR. Horizontal SP channels at all SDCS stations were rotated. NORSAR "P" arrival was obtained from their bulletin; the TAL transmission was not recoverable.

Long-period signals were recorded at all SDCS stations, ALPA and NORSAR. Horizontal LP channels at WH2YK and HN-ME were rotated. Horizontal LP channels at FN-WV, CPSO and RK-ON were not rotated due to signal clipping. Validity of ALPA and NORSAR long-period vertical beams is questionable and horizontal beams were not included because of program recovery problems. LASA long-period data were not recoverable.

Scaling factors on plots are millimicrons at 1 Hz (not corrected for instrument response) with the exception of LASA and NORSAR short-period plots. LASA SP scaling factors are millimicrons per inch. Scaling factors are not reported for NORSAR short-period.

# STATION DESCRIPTION

SITE CODE	LOCATION	SITE COORDINATES		ELEVATION METERS	INSTRUMENTATION	
		DEG	MN SECS		SHORT-PERIOD	LONG-PERIOD
ALPA	Alaska	65	14 00.0 N 147 44 36.0 W	626	None	31300
CPSO	McMinnville, Tennessee	35	35 41.4 N 085 34 13.5 W	574	6480 V 7515 H	SL210 V SL220 H
FN-WV	Franklin, West Virginia	38	32 58.0 N 079 30 47.0 W	910	KS36000	KS36000
LASA	Billings, Montana	46	41 19.0 N 106 13 20.0 W	744	HS10	7505A V 8700C H
HN-ME	Houlton, Maine	46	09 43.0 N 067 59 09.0 W	213	18300	SL210 V SL220 H
NORSAR	Kjeller, Norway	60	49 25.4 N 010 49 56.5 E	379	HS10	7505A V 8700C H
RK-ON	Red Lake, Ontario	50	50 20.0 N 093 40 20.0 W	366	18300	SL210 V SL220 H
WH2YK	White Horse, Yukon	60	41 41.0 N 134 58 02.0 W	853	18300	SL210 V SL220 H

Note: The orientation of the radial instruments at FN-WV is assumed to be 316° + 5° based on empirical data (event recordings). Rotation, where performed, is referenced to this azimuth and may be questionable.

# HYPOCENTER DETERMINATION

INPUT FOR EVENT 6 SEP 75  
 09:20:08.0 38.000N 41.000E 0KM.

STA.	ARRIVAL	RESIDUALS		DIST.	AZ.
		CAIC	REST		
NAC	09 26 10.1	-0.2	-0.2	29.1	329.8
HN-ME	09 31 48.1	0.7	0.7	74.3	316.8
WH2YK	09 32 24.8	-0.3	-0.3	81.1	357.9
FK-CN	09 32 32.4	-0.0	-0.0	82.4	332.8
FN-WV	09 32 49.0	-0.3	-0.3	85.7	317.2
IAC	09 33 11.4	C.9	C.9	90.1	337.9
CFSC	09 33 14.2	-0.9	-0.9	91.1	318.9

## 67 HERRIN TRAVEL TIME TABLES

ORIGIN	IAT.	ICNG.	DEPTH (KM)	SDV	IT	STA
NC CONVERGENCE CN CAIC RUN						
09:20:37.4 39.053N	40.432E	158. CAIC	0.6	16	7	
09:20:09.3 38.543N	40.721E	C. REST	0.6	2	7	

CAIC				REST			
3	.	0		3	.	0	
4	.	0		4	.	0	
C	C.	0	0	0	0.	0	0
.	.	.	.	.	.	.	.
C	C.	0	0	0	0.	0	0
0	.	0		0	.	0	
C	.	0		0	.	0	

CHI2 COVERAGE ELLIPSE; 95 PER CENT CONFD..LEVEL, SDV= 0.92  
 MAJOR 79.6KM. MINOR 65.2KM. AZ= 43 AREA= 16304 SQ.KM. REST

# DATA SUMMARY

INPUT FOR EVENT 6 SEP 75  
09:20:08.0 38.000N 41.000E 0KM.

STA.	PHASE	ARRIVAL TIME	INST	EFF	PCT	MAGNITUDE	MS	DIR	DIST
NAC	EF	09 26 10.1	AE	1.0	524.	6.02			29.1
HN-MEM	EP	09 31 48.1	SFZ	1.0	6.	4.28			74.3
HN-ME	IC	10 00 22.0	IPT	26.0	1706.				
HN-ME	IR	10 04 32.0	IFZ	23.0	1888.		6.27		74.3
AIFA	IR	10 08 25.0	IFZ	23.0	206.		5.32		76.3
WH2YK	EF	09 32 24.8	SFZ	0.7	45.	5.16			81.1
FK-CN	EP	09 32 32.4	SFZ	0.9	197.	5.94			82.4
FN-WV	EP	09 32 49.0	SFZ	1.0	322.	6.14			85.7
IAC	EF	09 33 11.4	SAE	1.1	976.	6.70			90.1
CFSC	EP	09 33 14.2	SFZ	1.5	662.	6.62			91.1

CRIGIN	LAT.	LCNG.	DEPTH (KM)	MAG	SDV	STA	IPMAG	LPDV	LPSTA
09:20:09.3	38.543N	40.721E	0. REST	6.28	0.35	5	5.79	0.7	2

HN-ME NOT USED IN CALC RUN SF AVG. MAG.  
WH2YK NOT USED IN CALC RUN SF AVG. MAG.  
HN-ME NOT USED IN REST RUN SF AVG. MAG.  
WH2YK NOT USED IN REST RUN SF AVG. MAG.

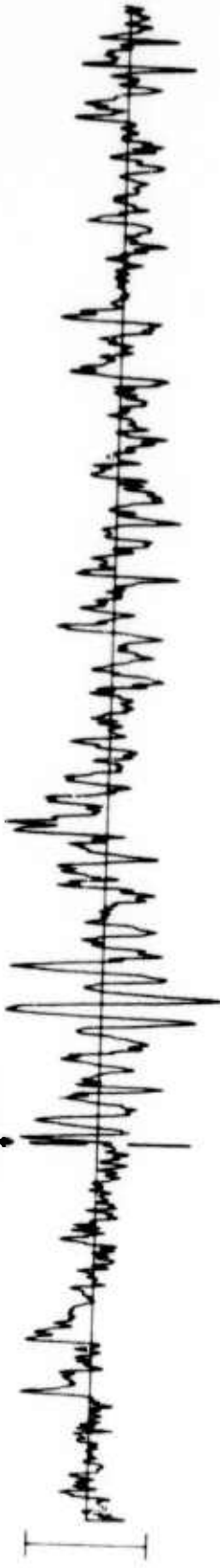
HN-ME AND WH2YK WERE NOT USED IN EITHER THE CALCULATED OR THE RESTRAINED SP AVERAGE MAGNITUDE CALCULATIONS BECAUSE THEIR MAGNITUDES EXCEED THE SDV PARAMETERS OF THE HYPOCENTER PROGRAM.



HN-ME 6 SEP 75

09:31:48.1

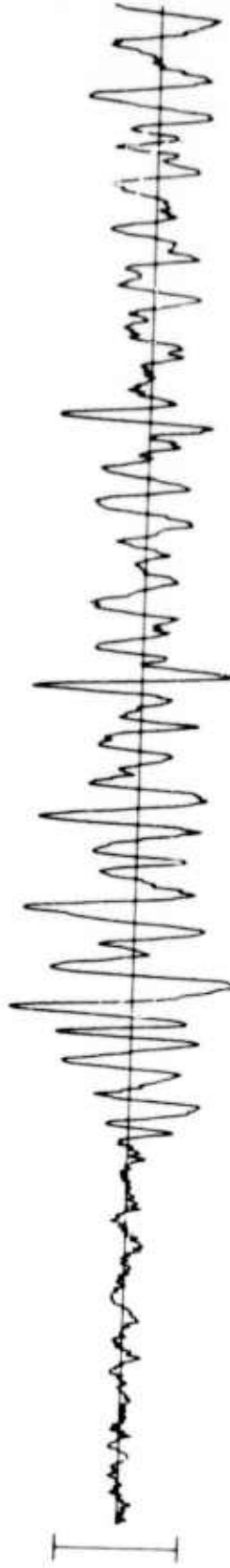
SPZ  
3.29 MU



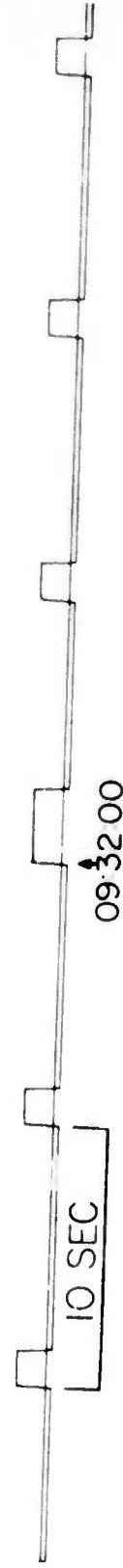
SPR  
67.69 MU



SPT  
57.67 MU



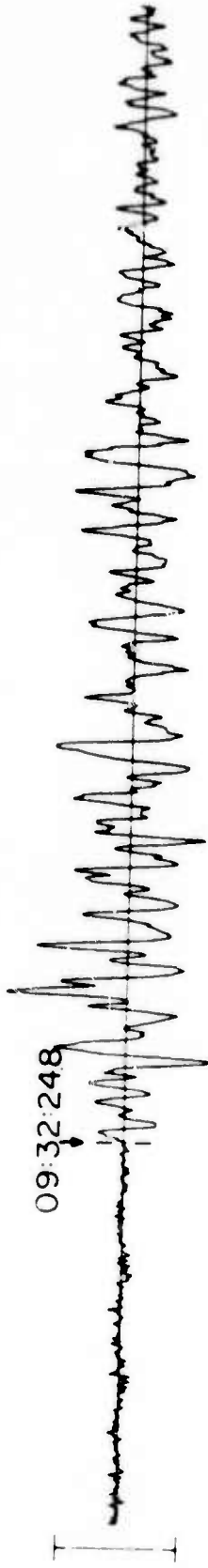
TIME



WH2YK 6 SEP 75

SPZ  
71.00 MU

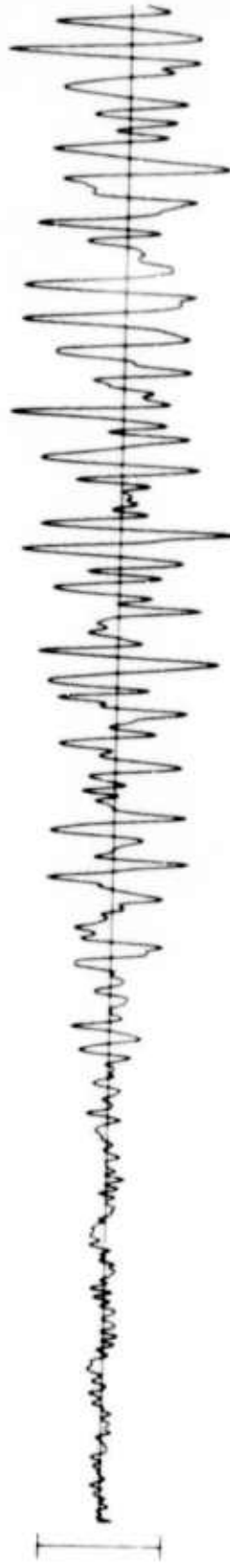
09:32:24.8



SPR  
30.64 MU



SPT  
41.95 MU



TIME

10 SEC

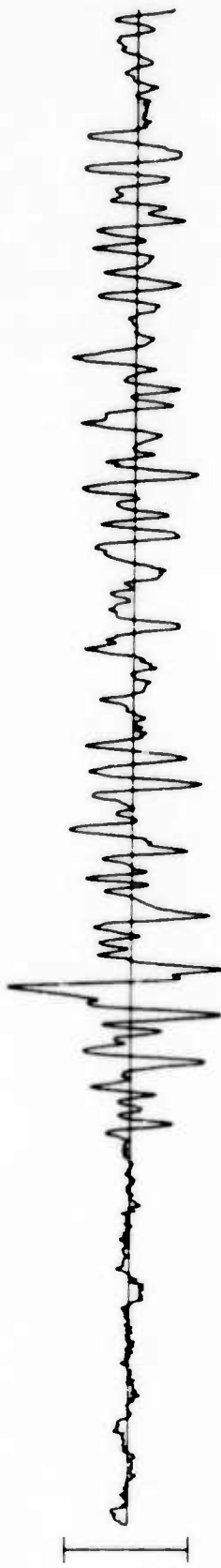
09:32:30

RK-QN 6 SEP 75

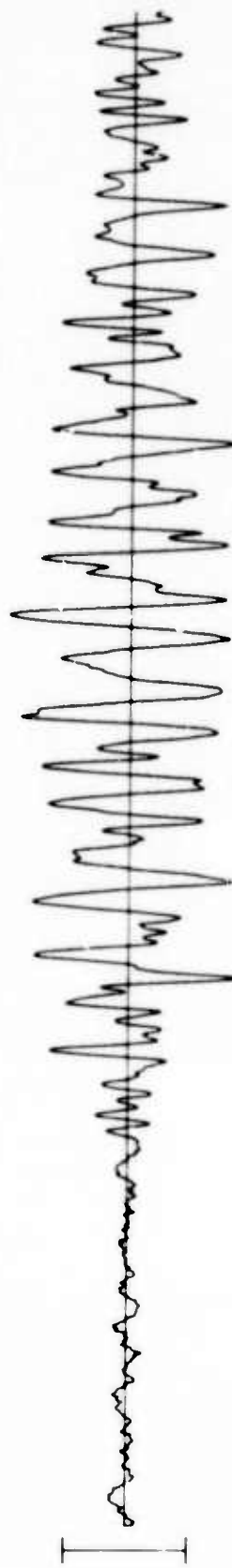
SPZ  
215.22 MU



SPR  
73.35 MU



SPT  
54.63 MU



TIME

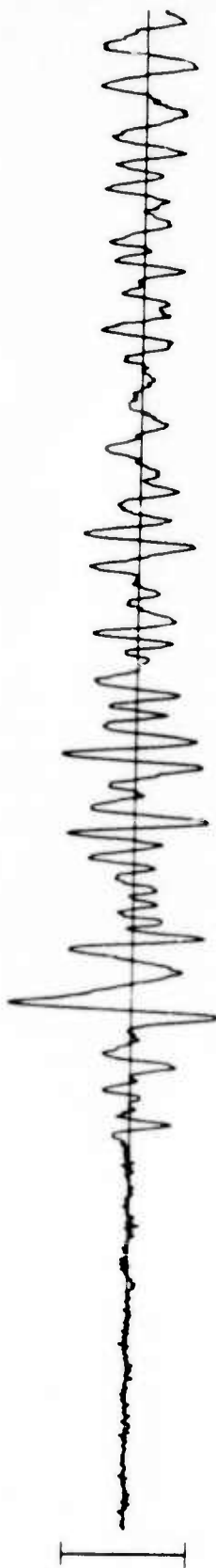


FN-WV 6 SEP 75

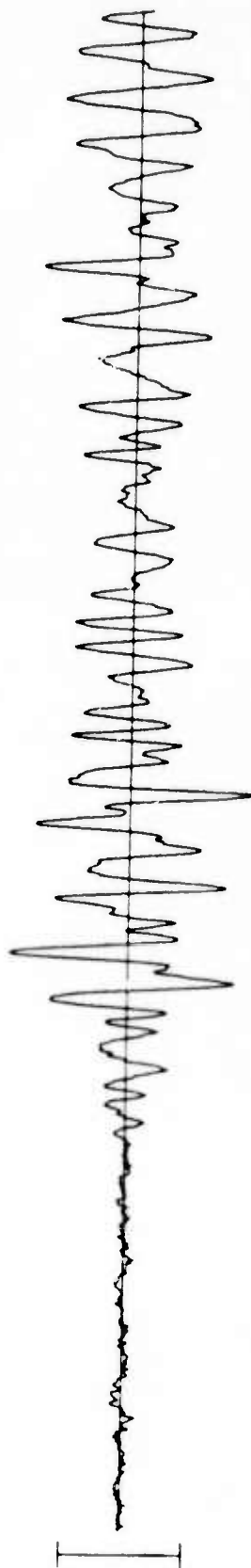
SPZ  
199.65 MU



SPR  
76.13 MU



SPT  
61.66 MU



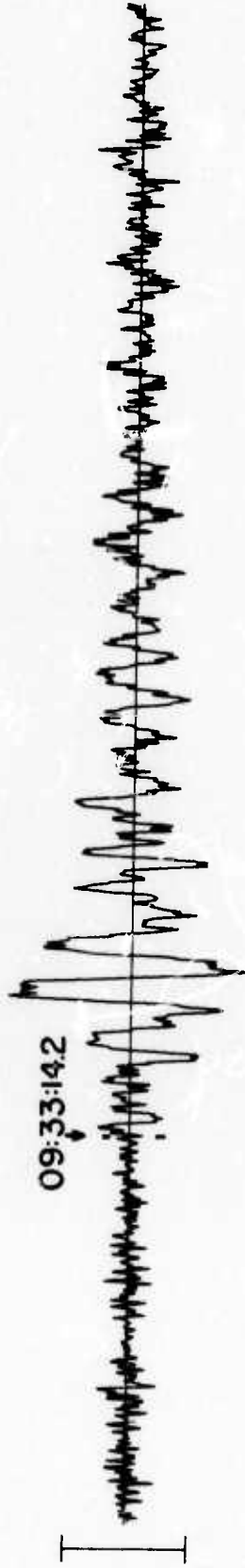
TIME



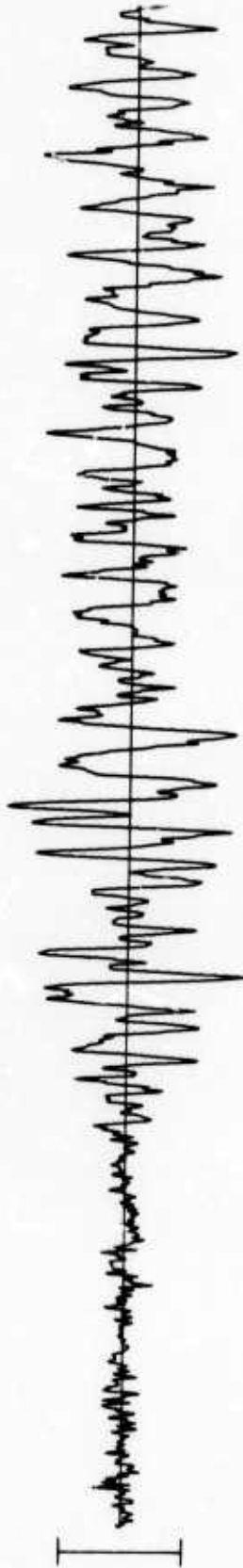
09:33:00

CPSO 6 SEP 75

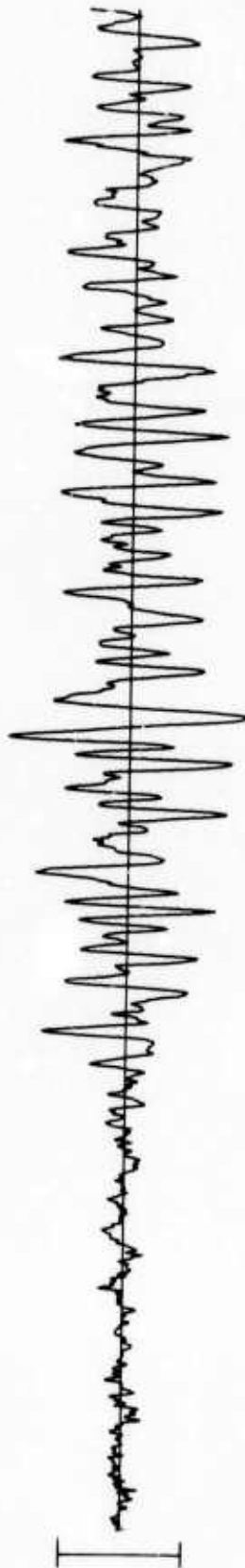
SPZ  
219.12 MU



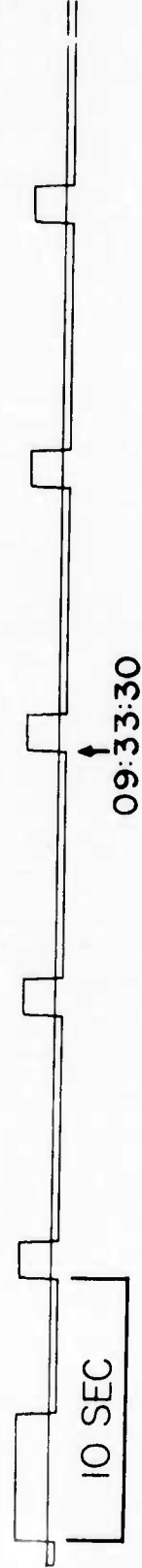
SPR  
30.98 MU



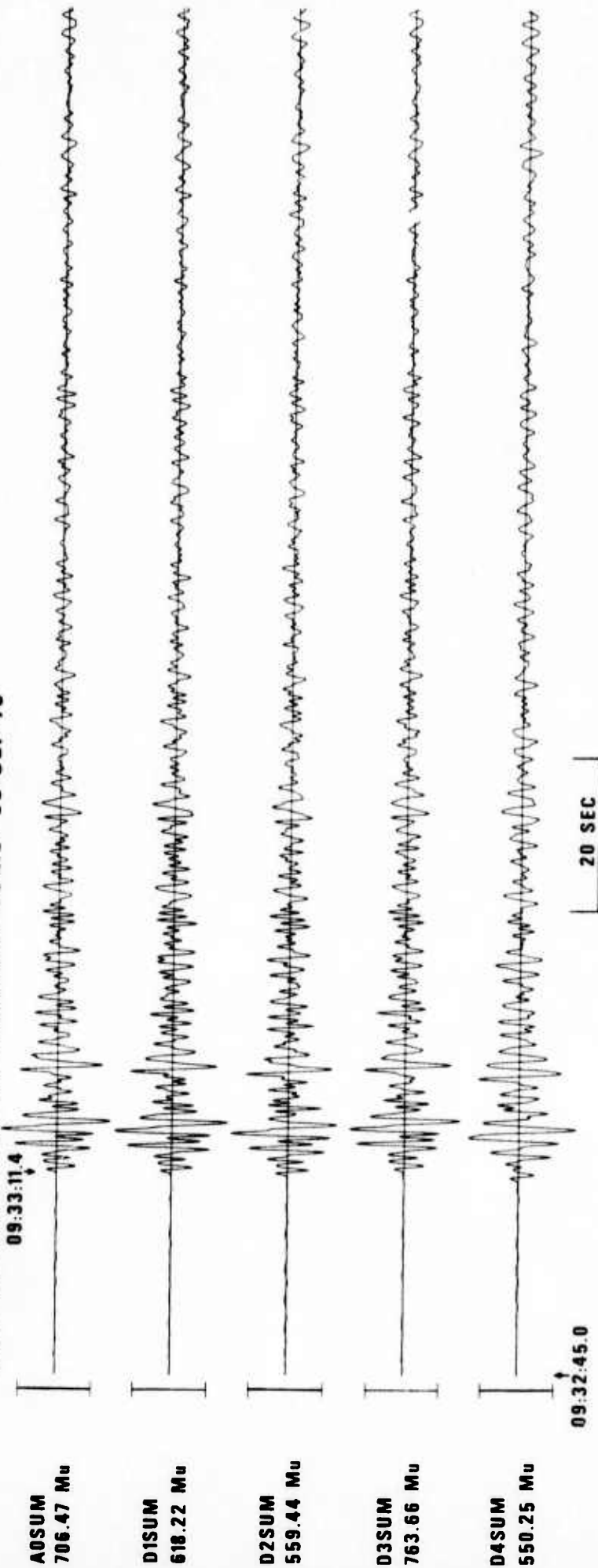
SPT  
36.87 MU



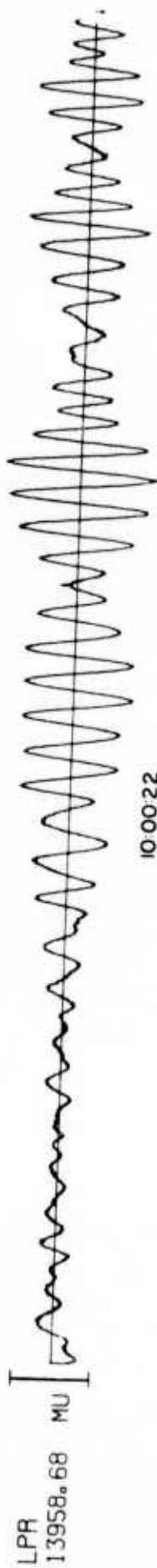
TIME



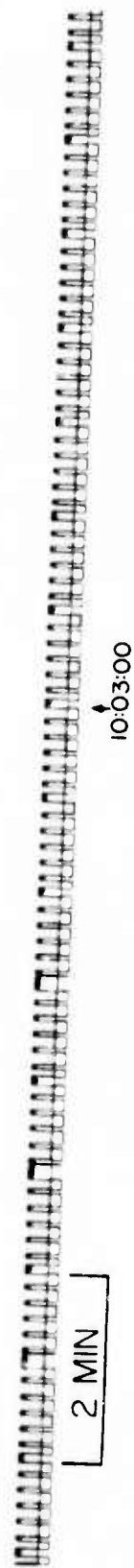
LASA INFINITE VELOCITY SUBARRAY SUMS 06 SEP 75



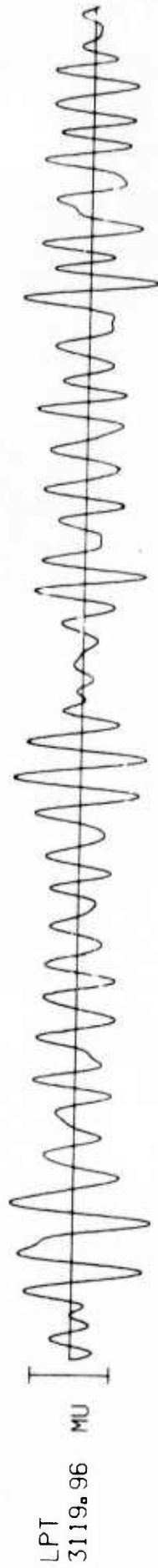
HN-ME 06 SEP 75



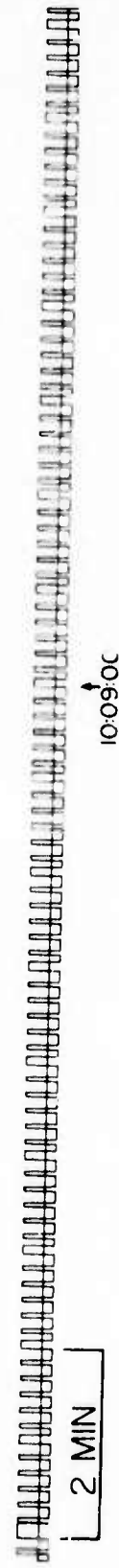
TIME



WH2YK 6 SEP 75



TIME



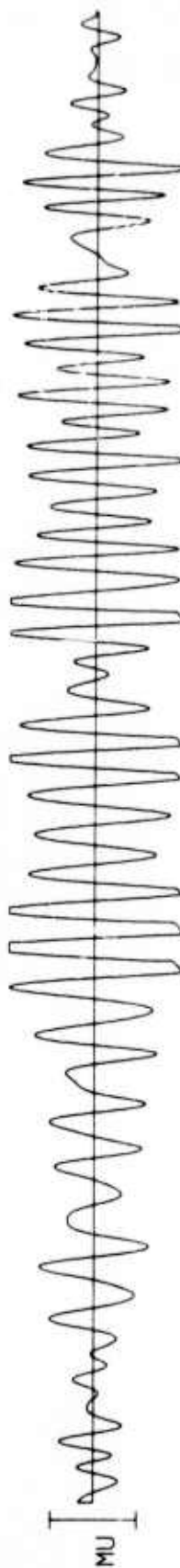


RK-QN 6 SEP 75

LPZ  
22693.59



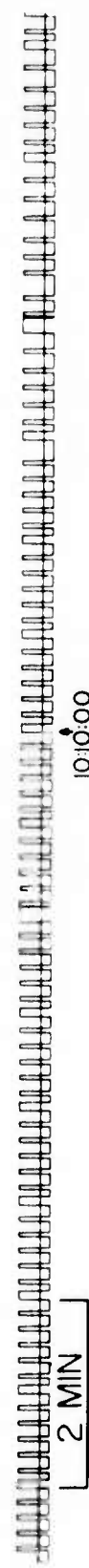
LPR  
21359.11



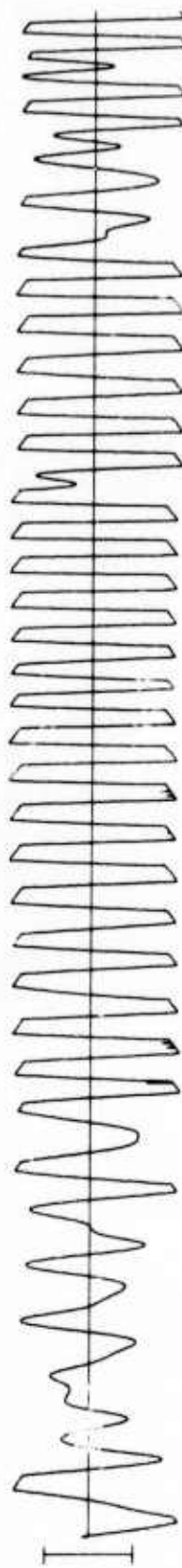
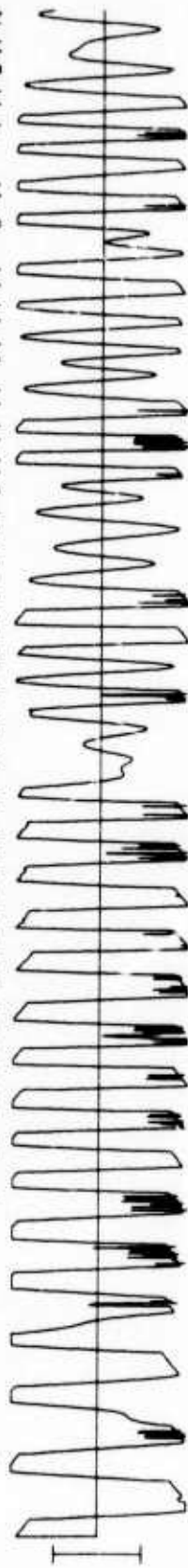
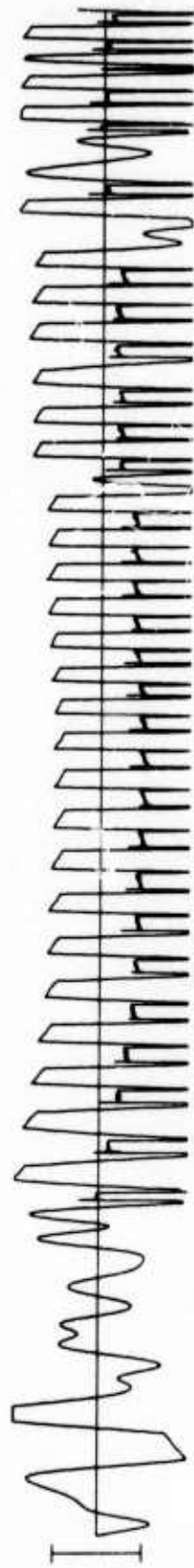
LPT  
20953.80



TIME



FN-WV 6 SEP 75



TIME



2 MIN

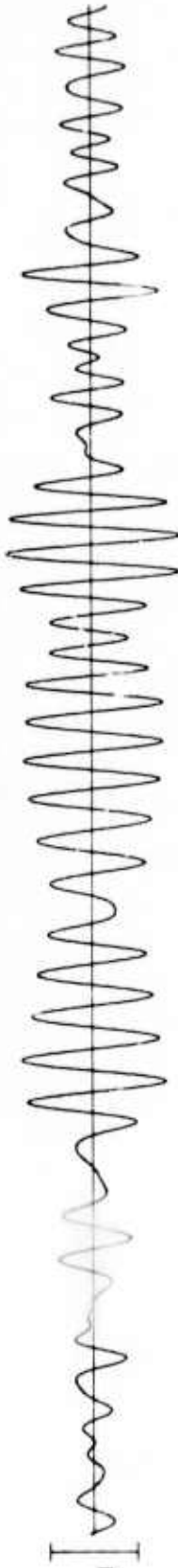
10:09:00

CPS0 6 SEP 75

LPZ  
20037.32  
MU



LPN  
26627.02  
MU



LPE  
29448.51  
MU



TIME



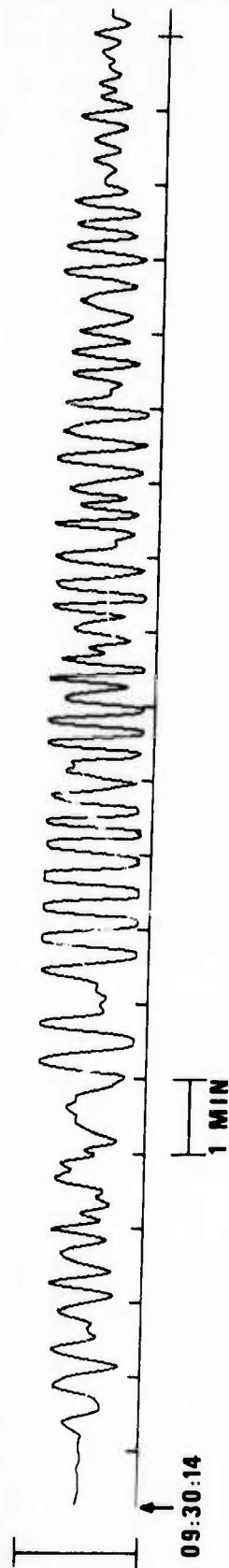
2 MIN

1010.00

# ARRAY LONG PERIOD VERTICAL BEAMS 06 SEP 75

NORSAR

LP VERTICAL  
51490.86 Mμ



ALPA

LP VERTICAL  
16984.39 Mμ

